

RE: SCP C 8262 – TRANSFER OF TECHNOLOGY

SUBMISSION BY THE WTO

This submission responds to the circular request C8262 dated 19 April 2013 requesting observers to the WIPO Standing Committee on the Law of Patents (SCP), to submit practical examples and experiences on patent-related incentives and impediments to transfer of technology, pursuant to the decision of the SCP at its nineteenth session concerning the revision of document SCP/18/8, *Patents and Transfer of Technology: Examples and Experiences*.

The WTO's Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) introduced intellectual property rules into the multilateral trading system for the first time. Aiming at a balanced approach to IPR protection in the broader societal interest, it stipulates that "the protection and enforcement of intellectual property rights should contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social and economic welfare, and to a balance of rights and obligations" (Article 7, *Objectives*).

Of particular practical relevance to the question of incentives for technology transfer, Article 66.2 of the TRIPS Agreement requires developed country Members of the WTO to provide incentives to enterprises and institutions in their territories for the purpose of promoting and encouraging technology transfer to least developed country Members in order to enable them to create a sound and viable technological base. Details of this provision and its implementation are available at http://www.wto.org/english/tratop_e/trips_e/techtransfer_e.htm, which also provides links to reports and other documentation concerning Article 66.2.

In 1998, the WTO Council for TRIPS agreed on arrangements for developed country Members to supply information on how Article 66.2 was being implemented; this yielded a series of documents submitted by WTO Members reporting on such measures. In 2003, pursuant to instructions given by Ministers at the Doha Ministerial Conference, the Council for TRIPS adopted a Decision¹ that put in place a mechanism for ensuring the monitoring and full implementation of the obligations in question. Under this Decision, developed country Members must submit annual reports on actions taken or planned in pursuance of their commitments under Article 66.2. These submissions are reviewed by the Council each year, providing an opportunity to discuss the nature and effectiveness of the reported incentives in promoting and encouraging technology transfer to least developed country Members in order to enable them to create a sound and viable technological base.

..... The Council for TRIPS has since received annual reports under this mechanism from Australia, Canada, the European Union and its member States, Japan, New Zealand, Norway, Switzerland, and the United States. A list of these reports is attached, which also includes references to documents submitted by the LDC Group posing questions about the measures reported.

These reports provide details of numerous examples of technology transfer programmes reaching back over the past 14 years; several also discuss the role of incentives more generally. A number of these may be relevant to the current work of the SCP on patent-related technology transfer issues. A number also refer to technology licensing in general. The WIPO secretariat and SCP delegates are accordingly invited to consider these reports for their potential relevance.

The questions posed by the LDC Group of WTO Members have also touched on questions of licensing and patents, for instance the scope of technology licences (concerning patents for pharmaceutical products, vaccines) and their applicability to LDCs.²

¹ WTO document IP/C/28, Implementation of Article 66.2 of the TRIPS Agreement - Decision of the Council for TRIPS of 19 February 2003

² WTO document IP/C/W/578

While the WTO Secretariat is not in a position to analyse, assess or classify these notifications, noting that they constitute reports prepared and provided by individual WTO Members under their own responsibility, the following examples drawn from recent reports may give a sense of the material notified that could be potentially relevant to the current work of the SCP (although no significance should be accorded to what is a purely illustrative selection):

- A recent Article 66.2 submission by **Canada**³ reported on Industry Canada's Communications Research Centre Canada (CRC), a federal government primary laboratory for R&D in advanced telecommunications and a centre of excellence in information and communications technologies, which sponsors several programmes for the transfer of communications technology by Canadian institutions and enterprises. CRC holds an extensive intellectual property portfolio consisting of approximately 240 patents representing some 90 technologies in the communications field. These proprietary technologies are licensed to both Canadian and international companies for commercial use. As an example of Canadian involvement in the transfer of technology over the last decade, CRC has had an on-going R&D relationship with the Centre for Development of Telematics (C-DOT) in India. Originally sponsored by Canadian International Development Agency (CIDA) in 1999 to collaborate in monolithic microwave integrated circuit (MMIC) chip development for radio frequency (RF) components and subsystems, and micro strip patch antenna designs, CRC and C-DOT have continued to work in more recent years on wireless communications systems development for enhanced infrastructure of broadband delivery in rural India. CRC has also transferred Software Defined Radio technology to India through licensing its SCARI suite of software to six Indian organizations and has an on-going R&D collaboration with Jasmin Inc. of India aimed at developing digital radio receiver technology.
- A recent Article 66.2 submission by the **European Union**⁴ reported on International Cooperation Programme (INCO), a dedicated cooperation programme which focuses on specific research and technological development activities, with the objective to enable developing countries, including LDCs, to be associated with the generation of knowledge and innovative and appropriate technologies needed to solve their specific problems and to attain sustainable economic development. The programme brings together North-South consortia of scientists from several countries (at least 2+2) to develop new knowledge and tools as well as policy formulations addressing underlying causes of problems in the fields of health, agriculture, environmental management, conservation of natural resources, etc. The programme's major asset is the added value and cost-effectiveness that joint research projects can generate by exploiting the resources and scientific excellence of the partners, funding new research, exchanging know-how and transferring technologies, providing on-the-job training and work experience. It also focuses on how international research cooperation can help stimulate socio-economic development and global competitiveness. The research consortia are entitled to generate jointly new intellectual property and share under equal terms applications. Many patent applications associate partners from North and South.
- A recent Article 66.2 submission by the **European Union** reported on PRO€INVEST, an EU-ACP (Africa, Caribbean and Pacific) partnership programme developed and undertaken by the European Commission on behalf of the ACP countries, with the objective of promoting investment and technology flows to enterprises operating in key sectors in the ACP States. It includes promoting direct investment, licensing, franchising, sub-contracting, and other partnership agreements - through support to firms looking for potential partners (partnership meetings).
- A recent Article 66.2 submission by **Switzerland** reported that the Swiss Federal Institute of Intellectual Property offers state-of-the-art searches free of charge for LDCs, and, by doing so, encourages innovative enterprises and industries in LDCs to use the patent system, to benefit from the information which can be gathered through this system as well as to protect their own inventions, thereby encouraging the building of technological capacity in LDCs.⁵

³ WTO document IP/C/W/580/Add.5

⁴ WTO document IP/C/W/497/Add.2

⁵ WTO document IP/C/W/580/Add.4

- A recent Article 66.2 submission by the **United States**⁶ reported on the launch by the US Patent and Trademark Office (USPTO) of the Patents for Humanity Pilot Programme to encourage assistance to LDCs and the less fortunate. The programme provides business incentives for patent owners and licensees to apply their technology to humanitarian purposes.
- This submission by the **United States**⁷ reported that for new technologies developed by scientists at the US National Institutes of Health (NIH) and the Food and Drug Administration (FDA), the NIH licenses biological materials and associated patent rights, when applicable, to institutions that have the capability of bringing products to the market in or for least developed countries. In addition, scientists often provide know-how to those who receive biological materials, such as vaccine seed strains with specialized growth requirements. Most of these technologies are associated with vaccines for diseases such as dengue, rotavirus, Hib, HPV, typhoid, meningococcal, varicella-zoster and HIV. This technology transfer permits the building of manufacturing capacity and associated skill sets in developing countries that also serve the needs of LDCs by providing access to vaccines that meet their public health needs. For example, in order to facilitate distribution of the HPV vaccine Gardasil® to underserved women in the developing world (defined by the GAVI Alliance to include many WTO LDC Members), the NIH has reached an agreement with Merck (a licensee of the NIH's patent rights covering the vaccine) to incentivize the distribution of vaccine to these at-risk populations. The arrangement enables Merck to include Gardasil® broadly in its worldwide tiered-pricing strategy, including any donative or not-for-profit transfers to distribution networks, governments or directly to individuals in developing world nations.
- This submission by the **United States**⁸ also reported that the NIH was the first contributor to the Medicines Patent Pool (MPP) in licensing US government-owned patents related to the use of HIV anti-retroviral (ARV) protease inhibitor drugs. The MPP promises to enhance access to ARV treatment for people living with HIV/AIDS in developing countries and enable the development of new combinations of ARVs and adapted formulations for developing countries. The NIH licensed patents resulted from research undertaken by the NIH and the University of Illinois at Chicago. The licence is seen as a first step for an expected on-going collaboration as NIH's Office of Technology Transfer and the MPP consider additional potential licence agreements to add other NIH-managed patents to the pool for technologies that may have potential as new HIV therapeutics.
- This submission by the **United States**⁹ also reported on the USDA approach to technology transfer, defined as the adoption of research outcomes (i.e. solutions) for public benefit. These science-based innovations from USDA intramural research – through these public/private partnerships – create new or improved technologies, processes, products and services that benefit the nation by increasing productivity, increasing efficiency (keeping costs low) and enhancing global competitiveness for the US agriculture sector. Thus, technology transfer functions are critical to accelerating utility of public R&D investments, creating economic activity, and in job creation and sustainable economic development. Principal among the formal instruments of technology transfer are Cooperative Research and Development Agreements (CRADAs), patents, and invention licences for commercialization by the private sector, as well as material transfer agreements and germplasm releases to industry. The mechanisms through which technology is transferred include licensing intellectual property (patents, Plant Variety Protections Certificates, and biological materials).
- The report also informed that the mission of the US Agriculture Research Service (ARS) is to transfer technologies for broad public use by the most effective mechanism. ARS pursues patents and licensing principally when this facilitates technology transfer to the market-place. This is usually the case when complementary investment by the private

⁶ WTO document IP/C/W/580/Add.6

⁷ WTO document IP/C/W/580/Add.6

⁸ WTO document IP/C/W/580/Add.6

⁹ WTO document IP/C/W/580/Add.6

sector is necessary to commercialize a product, and patent protection is required to protect this investment. Much of the technology resulting from USDA-funded research is transferred to the public by publication.

ANNEX

WTO MEMBERS' REPORTS ON IMPLEMENTATION OF TRIPS ARTICLE 66.2

Document number	Reporting Member	Date
IP/C/W/132	New Zealand	11/3/1999
IP/C/W/132/Add.1	United States	9/4/1999
IP/C/W/132/Add.1	United States	9/4/1999
IP/C/W/132/Add.2	Japan	20/4/1999
IP/C/W/132/Add.3	Australia	6/5/1999
IP/C/W/132/Add.4	European Communities and their Member States	6/8/1999
IP/C/W/132/Add.4/Suppl.1	Supplement - Germany and Ireland	20/10/1999
IP/C/W/132/Add.4/Suppl.2	Supplement - Belgium	23/2/2000
IP/C/W/132/Add.5	Switzerland	26/4/2000
IP/C/W/132/Add.6	Norway	27/9/2000
IP/C/W/132/Add.7	Canada	2/10/2000
IP/C/W/132/Add.1/Suppl.1	United States - Supplement	5/10/2001
IP/C/W/388	Canada	12/11/2002
IP/C/W/388/Add.1	New Zealand	15/11/2002
IP/C/W/388/Add.2	Australia	8/1/2003
IP/C/W/388/Add.3	Switzerland	8/1/2003
IP/C/W/388/Add.4	Japan	8/1/2003
IP/C/W/388/Add.5	Norway	8/1/2003
IP/C/W/388/Add.7	United States	4/2/2003
IP/C/W/388/Add.8	Czech Republic	11/2/2003
IP/C/W/388/Add.6	European Communities and Their Member States	13/2/2003
IP/C/W/412	Japan	10/11/2003
IP/C/W/412/Add.1	Czech Republic	10/11/2003
IP/C/W/412/Add.2	Switzerland	12/11/2003
IP/C/W/412/Add.3	United States	12/11/2003
IP/C/W/412/Add.4	Norway	14/11/2003
IP/C/W/412/Add.6	New Zealand	18/12/2003
IP/C/W/412/Add.5	European Communities	26/1/2004
IP/C/W/412/Add.7	Canada	9/6/2004
IP/C/W/431	New Zealand	16/11/2004
IP/C/W/431/Add.1	New Zealand	17/11/2004
IP/C/W/431/Add.2	Switzerland	17/11/2004
IP/C/W/431/Add.3	European Communities	7/1/2005
IP/C/W/431/Add.4	Canada	7/1/2005
IP/C/W/431/Add.5	United States	11/1/2005
IP/C/W/431/Add.6	Norway	23/3/2005
IP/C/W/431/Add.3/Suppl.1	European Communities - Supplement	14/4/2005
IP/C/W/452	Japan	5/10/2005
IP/C/W/452/Add.1	Switzerland	6/10/2005
IP/C/W/452/Add.2	Canada	10/10/2005
IP/C/W/452/Add.3	New Zealand	18/10/2005
IP/C/W/452/Add.4	Norway	21/10/2005
IP/C/W/452/Add.5	United States	12/12/2005
IP/C/W/452/Add.6	European Communities	12/12/2005
IP/C/W/452/Add.7	Australia	6/4/2006
IP/C/W/480	Japan	10/10/2006
IP/C/W/480/Add.1	New Zealand	12/10/2006

Document number	Reporting Member	Date
IP/C/W/480/Add.2	Australia	13/10/2006
IP/C/W/480/Add.3	Switzerland	13/10/2006
IP/C/W/480/Add.4	Norway	13/10/2006
IP/C/W/480/Add.7	Canada	20/11/2006
IP/C/W/480/Add.6	United States	21/11/2006
IP/C/W/480/Add.5	European Communities	12/2/2007
IP/C/W/497	Switzerland	1/10/2007
IP/C/W/497/Add.1	Japan	11/10/2007
IP/C/W/497/Add.3	New Zealand	3/12/2007
IP/C/W/497/Add.4	Norway	3/12/2007
IP/C/W/497/Add.5	United States	3/12/2007
IP/C/W/497/Add.6	Canada	3/12/2007
IP/C/W/497/Add.7	Australia	3/12/2007
IP/C/W/497/Add.2	European Communities	4/12/2007
IP/C/W/519	Japan	9/10/2008
IP/C/W/519/Add.2	Norway	13/10/2008
IP/C/W/519/Add.1	New Zealand	14/10/2008
IP/C/W/519/Add.3	United States	16/10/2008
IP/C/W/519/Add.4	Switzerland	23/10/2008
IP/C/W/519/Add.5	Canada	23/10/2008
IP/C/W/519/Add.6	Australia	13/11/2008
IP/C/W/519/Add.7	European Communities	10/2/2009
IP/C/W/536	Japan	12/10/2009
IP/C/W/536/Add.1	United States	12/10/2009
IP/C/W/536/Add.2	Australia	19/10/2009
IP/C/W/536/Add.3	Switzerland	20/10/2009
IP/C/W/536/Add.4	Norway	20/10/2009
IP/C/W/536/Add.5	Canada	23/10/2009
IP/C/W/536/Add.6	New Zealand	23/10/2009
IP/C/W/536/Add.7	European Communities	27/4/2010
IP/C/W/551	Norway	11/10/2010
IP/C/W/551/Add.1	Australia	14/10/2010
IP/C/W/551/Add.2	Switzerland	18/10/2010
IP/C/W/551/Add.3	Japan	20/10/2010
IP/C/W/551/Add.4	New Zealand	25/10/2010
IP/C/W/551/Add.5	United States	25/10/2010
IP/C/W/551/Add.6	Canada	25/10/2010
IP/C/W/551/Add.7	European Union	31/5/2011
IP/C/W/558	Norway	5/10/2011
IP/C/W/558/Add.1	Japan	10/10/2011
IP/C/W/558/Add.2	New Zealand	14/10/2011
IP/C/W/558/Add.3	Australia	14/10/2011
IP/C/W/558/Add.4	Canada	14/10/2011
IP/C/W/558/Add.5	Switzerland	14/10/2011
IP/C/W/558/Add.6	United States	20/10/2011
IP/C/W/558/Add.2/Corr.1	New Zealand - Corrigendum	1/11/2011
IP/C/W/558/Add.7	European Union	21/2/2012
IP/C/W/580	Japan	16/10/2012
IP/C/W/580/Add.1	New Zealand	19/10/2012
IP/C/W/580/Add.2	Australia	24/10/2012
IP/C/W/580/Add.3	Norway	24/10/2012
IP/C/W/580/Add.4	Switzerland	24/10/2012
IP/C/W/580/Add.5	Canada	31/10/2012
IP/C/W/580/Add.6	United States	1/11/2012

Document number	Reporting Member	Date
IP/C/W/580/Add.7	European Union	2/11/2012

	<i>Selected other documents</i>	
IP/C/W/561	Proposed format for reports submitted by the Developed Country Members under article 66.2 - Communication from Angola on behalf of the LDC Group	6/10/2011
IP/C/W/562	Questions posed by the LDC Group in the context of the ninth annual review under paragraph 2 of the Decision on the implementation of article 66.2 of the TRIPS Agreement - Communication from Angola on behalf of the LDC Group	6/10/2011
IP/C/W/578	Questions posed by the LCD Group in the context of the tenth annual review under paragraph 2 of the decision on the Implementation of article 66.2 of the TRIPS Agreement - Communication from Angola on behalf of the LDC Group	9/10/2012
